

INEEL SNF Shipping Facility Plans

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By

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Types of SNF Packages to be Shipped to the Repository

- The INEEL has a large number of different types of SNF
- The SNF will be shipped to the repository in three general types of packages
 - Standard Canisters
 - Bare Commercial fuel
 - Contained Failed commercial fuel

Current INEEL SNF Plans

- Commercial SNF in storage at Test Area North (TAN)
 - Most in dry storage casks, some has been consolidated
 - Some in wet basin - will be moved into dry storage casks
- Ship commercial fuel from TAN, packaging the fuel in commercial fuel transportation casks using the TAN hot shop.
 - Intact commercial SNF will be shipped bare like all commercial fuel
 - Non-intact SNF will be packaged into standard SNF canisters or into commercially available failed fuel canisters

TAN Hot Shop Specifications

- 51 feet wide, 165 feet long, 55 feet high
- 110 / 10 ton overhead crane
- Rail and truck access into hot shop

Dry transfer operations have previously been conducted in the hot shop

Current INEEL SNF Plans (continued)

- Fuel is presently stored in wet facilities at the Idaho Nuclear Technology and Engineering Center (INTEC) Test Reactor Area (TRA) and Power Burst Facility (PBF)
- SNF is and will be received from off site shippers both foreign and domestic
- All SNF is being consolidated from these facilities to INTEC
- All SNF is being moved into dry storage facilities
- SNF containing metallic sodium metal will be treated to remove the sodium
- All SNF at INTEC will be repackaged into standard canisters and placed into dry long-term interim storage.

Shipment to the Repository from INTEC

- No current facilities are capable of loading a envisioned transportation cask
- A new facility that will have SNF shipping capabilities will be constructed
- The facility will handle both rail and truck casks
- Only standard canisters will be shipped from INTEC
- Any High Level Waste (HLW) from the treatment of the sodium metal containing SNF at Argonne National Laboratory West will be packaged in standard canisters and shipped to the repository from INTEC

NOTE: If INEEL chooses to ship the TAN fuel to INTEC and to ship the commercial fuel from the INTEC shipping facility to the repository, the shipping package will be the same as that at TAN

High Level Waste Shipment to the Repository

INEEL will build a HLW storage facility that will have capability to load transportation casks. There are no present plans to co-ship SNF and HLW.

Contract Specifications for the Privatized Dry Storage Project

- Transportation Cask Envelop (including trunnions and impact limiter)
 - - 128 inches in diameter
 - - 308 inches long
 - - 300,000 pounds in weight
- Fully loaded Transportation Vehicle 200 tons maximum
- Truck and Rail access
- Truck bay at least 85 feet long

